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NOTICE OF ALLOWANCE AND FEE(S) DUE

7590 05/03/2010

WENDEROTH, LIND & PONACK, L.L.P. 1030 15th Street, N.W.,

Suite 400 East Washington, DC 20005-1503 EXAMINER
OMGBA, ESSAMA
ART UNIT PAPER NUMBER

3726 DATE MAILED: 05/03/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/572,919	03/21/2006	Shigeru Uemura	2006_0373A	7030

TITLE OF INVENTION: INSTALLATION DEVICE AND INSTALLATION METHOD FOR PISTON RING

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	08/03/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further indicated unless correcte maintenance fee notificat	form should be used f correspondence includired below or directed oth tions.	or trang the nerwise	smitting the ISSU Patent, advance or in Block 1, by (a					nould be completed where correspondence address as rate "FEE ADDRESS" for
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513 7590 05903/2010 WENDEROTH, LIND & PONACK, L.L.P. 1030 15th Street, N.W., Suite 400 East				Lbe	Certificate of Mailing or Transmission I hereby certify that this Fec(s) Transmital is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FHE address above, or being facsimile transmitted to the USPIO (571) 273-2885, on the date indicated below.			
Washington, DC	20005-1503							(Depositor's name)
								(Signature)
								(Date)
APPLICATION NO.	FILING DATE			FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.		CONFIRMATION NO.
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EXAMINER			ART UNIT	CLASS-SUBCLASS				
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CFR 1.363). Change of corresp. Address form PTO/SE Tee Address" indi PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME Al	ondence address (or Cha 3/122) attached. ication (or "Fee Address 2 or more recent) attach ND RESIDENCE DATZ ess an assignee is ident h in 37 CFR 3.11. Comp	nge of " Indic ed. Us	Correspondence ation form e of a Customer	2. For printing on the p (1) the asmes of up to or agents OR, alternati (2) the name of a single registered attorney or a 2 registered patent atto listed, no name will be FHE PATENT (print or tyy data will appear on the p 1 a substitute for filing an (B) RESIDENCE: (CITY	3 registered paten rely, e firm (having as a sgent) and the nam meys or agents. If printed. ee) stent. If an assign assignment.	memb es of u no nan	er a 2p to p to se is 3	ocument has been filed for
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Issue Fee Publication Fee (No small entity discount permitted) Advance Order - # of Copies			ed)	o. Payment of Fee(s): (Plea A check is enclosed. Payment by credit car The Director is hereby overpayment, to Depo	d. Form PTO-2038 authorized to char	is atta	ched. required fee(s), any de	
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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



UNITED STATES PATENT AND TRADEMARK OFFICE

NITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Offic Address: COMMISSIONER FOR PATENTS

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1030 15th Street, N.W.,			ART UNIT	PAPER NUMBER	
Suite 400 East Washington, DC 20005-1503			3726	_	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 989 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 989 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

Application No. Applicant(s) 10/572.919 UEMURA ET AL Notice of Allowability Examiner Art Unit Essama Omoba 3726 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to the amendments filed April 5, 2010. 2. The allowed claim(s) is/are 1-8.

1. T Certified copies of the priority documents have been received.

b) \(\subseteq \text{Some* c) \subseteq \text{None of the:}

3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

2. Certified copies of the priority documents have been received in Application No.

3.
☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has	THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements
noted below.	Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE	-MONTH PERIOD IS NOT EXTENDABLE.

4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

(a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

1) hereto or 2) to Paper No./Mail Date

(b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6.

DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. | Notice of References Cited (PTO-892)

2. Notice of Draftperson's Patent Drawing Review (PTO-948)

 Information Disclosure Statements (PTO/SB/08). Paper No./Mail Date

4. T Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. Notice of Informal Patent Application

Interview Summary (PTO-413), Paper No./Mail Date

7.

Examiner's Amendment/Comment

8. X Examiner's Statement of Reasons for Allowance

9. ☐ Other .

Application/Control Number: 10/572,919 Page 2

Art Unit: 3726

Allowable Subject Matter

Claims 1-8 are allowed.

2. The following is an examiner's statement of reasons for allowance: regarding claim 1. US Patent 5.404.629 to Liechty et al. represents the closest prior art. Applicant's invention differs from the Liechty et al. patent in that it includes a ring holding mechanism that has a quide passage used to quide a piston ring extruded by an extruding mechanism, the ring holding mechanism being driven so as to move close to and apart from a piston in one direction intersecting with an extruding direction, a ring diameter extending mechanism that can freely enter and leave the guide passage defined by the ring holding mechanism, these in combination with the rest of the limitation in the claim. Regarding claim 8, the installation method recited therein differs from the installation method of Liechty et al. in that a push-out member in a guide passage is used to extrude a lowest piston ring and move the extruded piston ring toward a predetermined position in a horizontal direction and the push-out member is pre-moved downwardly in a vertical direction by a predetermined amount when the push-out member is returned to a waiting position, these in combination with the rest of the limitations in the claim

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Application/Control Number: 10/572,919

Art Unit: 3726

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Essama Omgba whose telephone number is (571) 272-4532. The examiner can normally be reached on M-F 9-6:30, 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Essama Omgba/ Primary Examiner, Art Unit 3726

eo April 22, 2010